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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,042	04/05/2001	Norman S. Martucci	79287.21620	4862

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WASHINGTON, DC 20036-5304

EXAMINER

HOOK, JAMES F

ART UNIT	PAPER NUMBER
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3754

MAIL DATE	DELIVERY MODE
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10/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.		Applicant(s)	
	09/827,042		MARTUCCI ET AL.	
	Examiner		Art Unit	
	James F. Hook		3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-14, 16, 17, 19 and 20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-14, 16, 17, 19, and 20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the skin must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 8 depends from claim 1 ultimately and claim 1 now recites a "skin" is formed on the polyamide layer of the jacket, however, claim 8 recites that this layer is "unexpanded" which is contradictory to the layer having a skin when it is not known how an unexpanded layer can still be provided with a skin when the plastic layer in an unexpanded state would be of the same consistency throughout the layer. If applicant feels this can still be achieved, then the examiner will have to hold the specification as not providing adequate support for teaching how a skin layer can be provided to an unexpanded layer. At this time, however, it appears an oversight to have left claim 8 still pending when such would no longer be applicable with the skin recitation now in the independent claim.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soles in view of Martucci (084). The patent to Soles discloses the recited hose assembly consisting of a tubular first layer 50 formed of a polymeric fluorocarbon material such as

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polytetrafluoroethylene (PTFE) which is inherently resistant to chemical and heat degradation, at least one braided layer 52 which is inherently capable of passing a volumetric test and whip test, where such is disposed around the inner layer and is formed of metal wires, and a jacket 54 formed of extruded polyamide that is extruded such that the jacket maintains the braided layer in place between the first layer and the jacket. The patent to Soles discloses all of the recited structure with the exception of forming the outer polyamide layer with a skin. The patent to Martucci discloses the recited hose assembly comprising an inner layer 116 which can be formed of expanded or foamed fluoropolymers such as PTFE, where reinforcements 121 are provided over the foamed layer, and end couplings 130 are also provided, and where the outer layer can be provided as an expanded polyamide or unexpanded, where a skin can be provided to the foam layers. It would have been obvious to one skilled in the art to modify the jacket layer of Soles by forming the layer of a material having a skin as such is known in the art to form the outer layer of a foamed polyamide with a skin to better protect the reinforcement and form a layer in the foam that is not open celled as suggested by Martucci where such would save money in labor costs and would better protect the reinforcement from damage as well as prevent fluids from soaking into the jacket layer.

Claims 1-3, 6-10, 12-14, 16, 17, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Atwell (201) and Martucci (084). The patent to King discloses the recited hose assembly comprising a tubular first layer 12 made of a polymeric material resistant to chemical and heat degradation, which can be provided

with carbon black 16 to dissipate electrical charge, a jacket layer 14 disposed about the inner layer, and at least one aramid fiber braided layer 13 disposed between the inner and jacket layers where the use of an aramid fiber layer will allow the layer to be "capable" of passing tests due to the inherent properties of the fibers being used, where glass fibers also can be used in combination with the aramid fibers, where the inner and jacket layers can be formed of a fluorocarbon material such as PTFE, and a coupling means 30 can be provided on the hose ends. The patent to King also states that the outer layer 14 holds the fabric layer in place, and that the layer adds abrasion resistance. Layer 14 is also described as a coating that coats the yarns, therefore it is considered to be a layer formed over the yarn layer. The patent to King discloses all of the recited structure with the exception of forming the outer layer by extruding it, clearly reciting that the jacket layer extends beyond the braided layer, foaming the inner layer, providing the jacket layer with a skin, and forming the jacket of polyamide. The patent to Atwell discloses the recited hose assembly comprising an inner layer 2, a reinforcement layer 3 made up of nylon where the outer layer 5 can be extruded over and then embedded in the reinforcement layer such that the outer layer holds the braided layer to the inner hose, and where the jacket or outer layer 5 is made of various different plastics including various types of nylon (which is polyamide) including nylon 6 and 12. It would have been obvious to one skilled in the art to modify the outer layer of King by using an extrusion process to place the layer on the outside of the reinforcement layer and then embed it into the reinforcement layer as suggested by Atwell as such would be an equivalent way to insure the jacket layer embeds into the

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braided layer and connects the inner layer to the jacket or outer layer to prevent delamination thereby saving money in replacement costs. It would have been obvious to one skilled in the art to modify the inner layer of King to be formed of foamed material and to modify the jacket layer to have a skin as suggested by Martucci where such are alternative ways to form the inner and outer layers where such provides more protection to the hose as well as flexibility thereby saving money in replacement costs.

Claims 16, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over King in view of Powell (988) and Martucci (084). The patent to King discloses the recited hose assembly comprising a tubular first layer 12 made of a polymeric material resistant to chemical and heat degradation, which can be provided with carbon black 16 to dissipate electrical charge, a jacket layer 11 disposed about the inner layer, and at least one aramid fiber braided layer 13 disposed between the inner and jacket layers where the use of an aramid fiber layer will allow the layer to be "capable" of passing tests due to the inherent properties of the fibers being used, where glass fibers also can be used in combination with the aramid fibers, where the inner and jacket layers can be formed of a fluorocarbon material such as PTFE, and a coupling means 30 can be provided on the hose ends. The patent to King also states that the outer layer 14 holds the fabric layer in place, and that the layer adds abrasion resistance. Layer 14 is also described as a coating that coats the yarns, therefore it is considered to be a layer formed over the yarn layer. The patent to King discloses all of the recited structure with the exception of forming the outer layer by extruding it, forming the jacket with a skin, and forming the jacket of polyamide including nylon 6. The patent

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to Powell discloses the recited hose assembly comprising an inner layer 14 of PTFE and other materials, a reinforcement layer 30 made up of different fibers where the outer layer 40, which can be made of polyamides, of which nylon 6 is listed elsewhere as the types of polyamides used to make layers of the hose, can be extruded over and then embedded in the reinforcement layer, or other methods such as spray coating, dip coating, cross head or coextrusion, or spirally wrapped (col. 7, lines 42-56), and where an adhesive can be used with the fibers to adhere them to the hose. It would have been obvious to one skilled in the art to modify the outer layer of King by using an extrusion process to place the layer on the outside of the reinforcement layer and then embed it into the reinforcement layer as suggested by Powell as such would be an easier process to use without requiring thinning of the polymer layer for application thereby reducing costs and smoothing the outer layer for aesthetic purposes, and such is an equivalent method used as suggested by Powell, to modify the outer layer to be made of polyamides such as nylon 6 as such is a known equivalent material used for protective jackets where such is a cheaper material as suggested by Powell where such would prevent premature failure thereby saving money. It would have been obvious to one skilled in the art to modify the jacket layer of King by forming the layer of a material having a skin as such is known in the art to form the outer layer of a foamed polyamide with a skin to better protect the reinforcement and form a layer in the foam that is not open celled as suggested by Martucci where such would save money in labor costs and would better protect the reinforcement from damage as well as prevent fluids from soaking into the jacket layer.

Claims 1, 2, 6-14, 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Soles in view of Powell (988) and Martucci (084). The patent to Soles discloses all of the recited structure with the exception of forming the braided reinforcement layer of aramid fibers, forming the outer layer of fluorocarbon material, and adding a conductive agent to the inner layer. The patent to Powell discloses the structure above and teaches that it is old and well known in the art to form braided reinforcing layers of various types of materials including metal wires and aramid fibers, and that the outer layer can be formed of various materials including polyamides and fluoropolymers, and that carbon black can be added to layers to make them conductive. It would have been obvious to one skilled in the art to modify the reinforcement layer of Soles by substituting aramid fibers for the metal wires used as such are known equivalent materials used for reinforcing layers, to modify the outer layer to be made of a fluoropolymer material as such is a known equivalent material used to form outer cover layers, and to provide a layer in the hose with conductive material such as carbon black to make the layer conductive to electricity to dissipate any charge the hose is exposed to as suggested by Powell where such would provide alternative materials to be used for different environments and would help prevent premature failure thereby saving money in replacement costs. It would have been obvious to one skilled in the art to modify the jacket layer of Soles by forming the layer of a material having a skin as such is known in the art to form the outer layer of a foamed polyamide with a skin to better protect the reinforcement and form a layer in the

foam that is not open celled as suggested by Martucci where such would save money in labor costs and would better protect the reinforcement from damage as well as prevent fluids from soaking into the jacket layer.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Soles in view of Powell (988) and Martucci (084) as applied to claims 1, 2, 6-14, 16, 17 and 20 above, and further in view of King. The patent to Soles as modified discloses all of the recited structure with the exception of providing the reinforcing layer with two different types of materials where glass fibers can also be included in the reinforcing layer. It would have been obvious to one skilled in the art to provide the reinforcing layer in Soles as modified with additional glass fibers as suggested by King where such would provide added strength to the reinforcing layer thereby preventing premature failure and saving money in replacement costs.

Response to Arguments

Applicant's arguments with respect to claims 1-3, 6-14, 16, 17, 19, and 20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patent to Maybee disclosing a state of the art hose.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

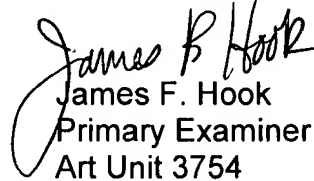
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James F. Hook whose telephone number is (571) 272-4903. The examiner can normally be reached on Monday to Wednesday, work at home Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


James F. Hook
Primary Examiner
Art Unit 3754

JFH